

REMARKS

Claims 1 to 20 are in the case.

Claims 1, 11, 16, and 20 have been amended herein to more particularly point out and distinctly claim the invention. The amendments all have basis in the specification and original claims.

Claim 1 is directed to a process for producing an aqueous cationic dispersion of polymers useful as a sizing agent for paper wherein monomers are emulsion polymerized in the presence of 30 to 50% by weight of a surfactant consisting of imidized styrene/maleic anhydride copolymer, in the absence of conventional accessory surfactant. The amendments to claim 1 are supported at page 6, line 4 and line 9. The term "accessory" finds basis in the cited Verdol, et al., reference since Verdol, et al., refer to the conventional surfactants they use in addition to the imidized copolymer as "accessory surfactants." Reading Verdol, et al., and the present specification together, it is very clear that the accessory surfactants Verdol, et al., use in all of their examples are the conventional surfactants which applicants exclude.

The exclusion of the conventional accessory surfactants in combination with the special range of 30 to 50% by weight of the imidized copolymer surfactant is not disclosed by Verdol, et al., and distinguishes Verdol et al under 35 U.S.C. 102. Verdol, et al., also fail to teach compositions which are useful as sizing agents for paper, as called for by claim 1. Claim 1 is directed to a novel invention.

Claim 11 has been amended to require that the composition be useful as a sizing agent for paper, supported in the specification as mentioned, supra, and distinguishing Verdol, et al., as mentioned supra.

Claim 16 has been made independent by incorporating the limitations of claim 11 on which it was previously dependent. Claim 16 has been broadened to cover internal as well as external sizing agents, but has been limited to paper sizing agents. These amendments have clear support in the specification, as mentioned above.

Claim 16 et seq., were rejected as unpatentable over Verdol, et al., under 35 U.S.C. 103. The Office Action acknowledged that Verdol, et al., do not teach any sizing agents used in papermaking, but states that the fact that the Verdol, et al., compositions have water repellant characteristics and use as a paper coating was taught. There are many types of polymers which

have water repellant characteristics, but an extremely small percentage of such water repellant polymers can be used successfully as paper sizing agents. Such agents require very special properties and the mere fact that a polymer is known to be water repellant would not be enough to cause one of normal skill in this art to expect it to be useful as a paper sizing agent. The polymers of the present invention are novel and their use in paper applications where starch and pigments and ink-jet printability are important requirements, the cationic nature of the polymers attaching more easily to generally anionic printing inks, as pointed out at page 10, lines 14-24, are all factors which are important in this art (paper sizing) and are not taught or even remotely suggested by Verdol, et al. Therefore the invention set forth in claims 20, et seq., is not obvious over Verdol, et al.

For these reasons, reconsideration and withdrawal of all grounds of rejection and an early notice of allowance are respectfully requested.

RECEIVED
CENTRAL FAX CENTER
OCT 27 2003

Respectfully Submitted,

COZEN O'CONNOR

By:

Michael B. Fein
Michael B. Fein
Reg. No. 25,333
Cozen O'Connor
The Atrium
1900 Market Street
Philadelphia, PA 19103
(215) 665-4622(v)
(215) 701-2246 (f)
mfein@cozen.com

OFFICIAL

PHILA1\1951239 v1